

Educational Product

Educators & Students

Grades 5-12

ET-2004-10-134-ARC

Educational Topic

Air Traffic Management Trainer

Related Job Titles:

Air Traffic Management Instructional Designer, Air Traffic Services Trainer

Job Description:

This position is responsible for teaching recruits how to be air traffic controllers. This person must be knowledgeable in all of the air traffic control positions from flight service station to local control to TRACON control to Center control. This position requires years of experience prior to actual teaching. Additional training is needed in how to make presentations and instructing the adult learner. This person must demonstrate the abilities to communicate clearly, listen and respond appropriately, as well as understand all FAA regulations regarding aviation and flight rules.

Interests / Abilities:

- · Can you explain difficult concepts to your friends?
- Is it easy for you to "think on your feet" and be decisive?
- Are you comfortable making presentations in front of your classmates?
- Do your friends depend on you to lead the group through the process of solving a problem?
- Do you enjoy using a computer to get information and to help solve problems?

Suggested School Subjects / Courses:

- Physics (science of flight)
- Meteorology
- Aviation
- Algebra and graphing of equations
- · Computer training
- · Communication/Speech

Education / Training Needed:

A two or four year college degree must be obtained before initiation of Air Traffic Control (ATC) training. You must then successfully pass the Federal Aviation Administration (FAA) aptitude test before beginning Air Traffic Control Training through the FAA. Additional computer training is beneficial for this job.

Areas of expertise:

- · Excellent listening and communication skills
- Thorough knowledge of the air traffic management system and the FAA regulations
- Complete knowledge of all air traffic management positions

Additional Resources:

- Earth to Orbit: Engineering Design Challenges http://eto.nasa.gov/
- FAA Academy Homepage http://www.academy.jccbi.gov/
- Federal Aviation Administration http://www.faa.gov/
- Graduate Student Researchers Program http://spacelink.nasa.gov/Instructional.Materials/NASA.Educa tional.Products/Graduate.Student.Researchers.Program.Brochur e/.index.htmlt
- MATHCOUNTS Competition http://mathcounts.org/
- Mike Monroney Aeronautical Center (FAA Training Center)
 http://www.mmac.jccbi.gov/mmac
- Minority University Research and Education Programs http://mured.nasaprs.com/
- NASA Cooperative Education Program for college students http://spacelink.nasa.gov/Educational.Services/ NASA.Education.Programs/Student.Support/NASA.Cooperative .Education.Program/.index.html
- NASA Jobs http://nasajobs.nasa.gov/
- NASA SHARP Internship Program for high-schoolers http://www.mtsibase.com/sharp/
- NASA Student Employment http://nasajobs.nasa.gov/stud_opps/employment/index.htm
- NASA Student Involvement Program student contests http://www.nsip.net/index.cfm
- National Association of Air Traffic Specialists (NAATS) http://www.naats.org/

What can I do right now?

- · Spend time playing logic puzzles.
- · Spend time drawing maps from memory.
- Learn how to read all the different kinds of aeronautical charts.
- · Take a ground school course.
- Join Civil Air Patrol (CAP) and participate in their activities.
- Visit Virtual Skies to practice your problem solving skills by engaging in some computer activities that have you review information and assess a situation in a short amount of time (e.g. air traffic control simulation, flight simulation). http://virtualskies.arc.nasa.gov
- Find opportunities to be a peer mentor or tutor others.

- Professional Women Controllers, Inc. http://www.pwcinc.org/
- Revolutionary Vehicle Concepts and Systems student competition http://avst.larc.nasa.gov/competitions.html
- School of Aviation Science Air Traffic Control

http://www.aviation.wmich.edu/home.html

Tech-Interns.com http://www.tech-interns.com/

- Please take a moment to evaluate this product at:
- http://ehb2.gsfc.nasa.gov/edcats/educational topic
- Your evaluation and suggestions are vital to continually improving NASA educational materials.
- Thank you.



http://quest.nasa.gov/people/index.html